THE

BOSTON MEDICAL AND SURGICAL JOURNAL.

VOL. LXV. THURSDAY, NOVEMBER 14, 1861. No. 15.

DR. WARE'S LECTURES ON GENERAL THERAPEUTICS.

LECTURE IX.

GENTLEMEN,—We come next to certain further considerations relative to the digestive organs, viz., the food and drink. The condition of the patient, both as to appetite and power of digestion, and to the immediate necessity for nourishment, differs entirely in acute and chronic diseases. In the severer acute diseases, appetite for solid food is wanting and the power of digestion is suspended, whilst thirst, or at least the capacity of taking and absorbing liquids, and of a partial assimilation of them, continues. It is not essential to the maintenance in the system of the power of recovery that there should be any addition to the stock of solid material. The waste occasioned by the disease is supplied out of the stock previously accumulated. But it is not so with the liquids. These are rapidly consumed, and a constant supply is required, usually greater than in health. Consequently while hunger is absent, thirst is frequently very intense.

In chronic diseases, the state of things in this respect is very different. The appetite is not always impaired. It is sometimes even increased. The digestion and assimilation of food often remain very good. A supply of material to the system is as necessary as in health, since the waste is often as great or even greater. It is therefore desirable to take food. But the appetite and power of digestion, one or both, may be wanting, and this proves an obstacle to the recovery of the patient. Their restoration thus will become an important object in the treatment of a case, which is not so in acute diseases. Indeed, in a great many instances the treatment of chronic diseases is resolved chiefly into the management of the digestive organs as it regards the kind and amount of food and drink, and the adaptation of such means as will restore and keep up the appetite and promote perfect assimilation. In fact, many measures are had recourse to which, although they have no direct operation on the digestive apparatus, owe ultimately their favorable effect to the influence they have in promoting, indirectly, the improvement of the assimilation and nutrition.

Such as air and exercise, changes of climate, travelling, sufficient and comfortable sleep, and a tranquil and cheerful state of mind.

These remarks apply in full force to the strongly-marked cases of each kind. There are many which lie between the two, and the principles of treatment will require modification when applied to these intermediate ones. But these principles may be best illustrated by those cases in which the characteristics of the two classes are most distinct, and it is in these also that they require to be most strictly enforced.

In the strongly-characterized acute cases, water is often the only drink which is tolerated, particularly through the early periods. Even the most unsubstantial liquids may be loathed—such as lemonade, tea, toast-water, &c. In some cases, especially such as have a fatal termination, this continues throughout. The preference of the patient is to be always consulted as to kind, and for the most part as to quantity. The propriety of exceptions to this can only be determined by individual judgment, in view of the peculiarities of each case. Drinks should never be urged which excite disgust, or permitted which induce nausea.

Still, it is on the whole best to give liquids which contain nourishment, when they are tolerated, even if not absolutely desired. The support of the patient is maintained by it. This is effected in two ways—first, by the absorption of nutritious material; and, secondly, by its simple presence in the stomach. This depends upon a principle of wide application in disease of all kinds; viz., that the powers of the system are reinforced by the presence in the stomach of appropriate alimentary matter, independently of its digestion, and previous to any possible assimilation or admission of it into the circulation. A man, faint and exhausted by fasting and labor, is refreshed at once by a cup of tea or coffee, or by the first mouthful of food, and the feeling of strength and even the capacity for exertion is restored. A perfectly empty state of the stomach is usually attended by a sense of exhaustion, and this is relieved, temporarily at least, by the introduction of something which bears to the organ the relation of digestibility, even if the power of digesting it be at the time wanting. Hence, as a rule, whenever nourishment is tolerated, it should be given—and even when water alone is thus tolerated, it is probable that the office it answers is partly dependent upon this same principle.

This influence seems to be exerted even where no digestion or absorption takes place, though usually, it is probable, a sufficient change is produced upon the aliment, either before or after its absorption, to assimilate it in some degree to the circulating fluid, as we see in the case of the absorption of many liquids injected as nourishment into the rectum. The more solid portions, however, of the gruels, broths, &c., which are taken in the earlier stages of acute disease, it is not likely are at all digested, but are passed on through the canal. Later, even before actual improve-

ment has begun, the increasing needs of the system excite a greater effort for assimilation, and previous to convalescence a considerable amount of nourishment may be appropriated.

Different cases differ almost indefinitely in this respect, and although generally the more aggravated are those in which assimilation is most completely abolished, yet there are some patients who will digest considerable substantial nourishment throughout a very severe disease, and others who will pass through a very mild one on nothing but water. No one patient's capacity is ever to be the measure of any other one. We are to apply the general principle that every person in sickness is to be supplied with as much nourishment and of such a kind as he can bear without any distinct annoyance or oppression, but the measure is in each case to be determined by the actual observation of the case itself.

As nearly as any rule can be laid down as a guide to such observation, it may be stated that, for an adult of average condition, in an acute disease, four ounces of common nourishing liquids may be offered every four hours; the whole to be taken or not, as the patient is disposed—more drinks being given in the intervals; but the quantity and the periods, and also the substantiality of these liquids, must be accommodated to different persons and to different periods of disease.

There is one caution to be insisted on. If the above view of the manner in which nourishment in acute diseases is useful, be correct, a considerable quantity of the actual materials of the food must be left behind to be carried onward through the intestines. It is consequently of importance what these materials are. A liquid may be well borne in the stomach, and yet when its liquid parts are absorbed, what is left may either from its texture, its bulk, or from a liability to chemical changes, or from some less assignable cause, produce annoyance in the canal. This will be different in different diseases and in different persons. To illustrate by a single example. Common gruel, one of the mildest of the articles of sick diet, will sometimes, when its residuum has passed into the large intestines, become sour there, and produce irritation and flatus. I have known this take place to such an extent that the matters discharged were of as intense an acid as liquids of the same kind often are when they are thrown up by vomiting from the stomach. This consideration will explain some of the minor effects of food, and have already been adverted to in speaking of the management of the large intestines.

Food properly solid, such as bread and meat, are seldom admissible in that degree of acute disease to which these remarks are intended specially to apply. The reducing process of digestion, as it is termed by Dr. Prout, seems to be more uniformly and entirely suspended than the converting—that is to say, the preparatory process by which the texture of food is broken down and reduced to a thin liquid, is more interfered with than that by which

the mass thus prepared is vitalized and rendered capable of being applied to the nutrition of the tissues. Hence solid food, if not reduced, or imperfectly reduced, passes on in a solid form, whilst liquid food is more likely to be assimilated, or, if not assimilated and absorbed, passes on in a form less offensive to the organs with which it comes in contact. The reverse of this often happens in a state of health, in chronic diseases, and during convalescence, and the relative completeness or difficulty with which these processes are performed is probably one of the causes of the immense variety which we meet with in the working of the digestive organs in different persons, different states of disease and with different kinds of food.

In many cases, when digestion becomes active in the decline of disease and during convalescence, solid food is better borne than liquid, more rapidly recruits the strength, and is fæcalized and discharged in a better condition. But it is not always so. If the reducing process have been imperfectly performed, the residuary mass of solid food seems incapable of that proper fæcal change which renders it agreeable to the large intestines, and it produces either pain or some of those other disturbances which were formerly pointed out. This is seen in the most marked manner in cases where the intestines themselves have been inflamed, as in dysentery or colitis, or cholera infantum. In some cases of dysentery, for example, it becomes necessary, from this consideration, to confine the patient for a long time to food entirely liquid, the tenderness of the parts being such that even a few grains of rice or small pieces of bread excite severe pain. Such cases it is true are exceptional, but they do occur, and they serve to illustrate the minuteness with which in extreme cases it may become necessary to watch and regulate the diet of patients. Generally a very moderate amount of watchfulness is sufficient; but when difficulties arise, their causes and the manner of obviating them are to be determined by taking into view the circumstances which have been pointed out.

The conditions that are to govern the regulation of the diet are so multifarious that it is a matter of extreme difficulty to state them intelligibly or to give their due weight to each. The appetite is a very important one among them, and is always to be regarded as to the kind of food; much less as to its quantity. Its full satisfaction is not perfectly safe in any period of acute diseases. Yet a hungry patient is seldom to be denied something, and of the kind he desires. It is often astonishing to observe, when the fancy is strongly fixed upon some particular article, how well it will be borne and digested, even when it is one that would seem on ordinary principles to be one of the most improper. This is especially noticed when convalescence is fairly established. Even through the whole course of some acute cases, however, the appetite for solid food, and, with it its digestion, remains, and with

great caution may be indulged. Thus in scarlet fever, for example, I have known children otherwise very sick, take their usual food throughout, and without obvious injury.

There is no article which in cases of doubt, where the patient demands food in any stage of acute disease, can be so safely permitted as milk. There is, to be sure, a singular prejudice against its use, and it is regarded by most of those in the common care of the sick as one of the most unsuitable kinds of nourishment. This prejudice is entirely without foundation, and it is rarely, where it is desired and relished, that milk may not be administered in some quantity. The only real foundation for this impression is found in the fact that in certain constitutions milk is found to disagree, like many other of the most innocent and digestible articles, and that its curd is sometimes rejected in a condensed and hardened mass. But upon the whole, there is hardly any form of food equally substantial and nutritious, of which the residuum, when not digested, is passed on to the intestines, is received and fæcalized, with so little labor and irritation. We see how it is with nursing infants, in whom the coagulum, when greater quantities are taken than the system requires, is carried into the large intestines only partially digested, and yet is received and transmitted as easily as the ordinary fæces. Here it is true that the milk taken is more peculiarly adapted by nature to the system of the child, than that taken by adults; but it is also true that the milk of the several animals used by man, resembles the natural food more closely in its composition and adaptation to the wants of the human system than any other known substances. Exceptions there are, growing out of constitution and the circumstances of individual cases; but as a general rule of dietetics, I know of none more uniform.

There has always been a strange perversity of judgment among mankind as to the nature and requirements of the state of sickness. It has been looked upon as a state specifically different from health, in which whatever was most agreeable, refreshing and healthful to the well man, was to be denied to the sick. Patients have been immured in hot, close, ill-ventilated rooms, and confined to beds surrounded with close-drawn curtains; light and air have been excluded; instead of substituting the pure breath of heaven for the offensive exhalations of disease, it has been sought to hide them from the sense by the fumes of vinegar, of rum, of aromatic drugs, whilst chemical ingenuity has been exhausted for means to neutralize them by I know not what number of offensive and very probably injurious gases; instead of pure cold water, the parched and feverish tongue has been moistened by sparing quantities of a thousand infusions and other preparations, of which the best that could be said was that they were not directly hurtful; it has been supposed that the only safe means of cleanliness was sponging the hands and face from time to time with vinegar or rum, and that a frequent change of raiment or bedding was to expose the patient

to the pernicious influences of the air. Much of all this has long passed away. Vast improvements have doubtless been going on in all these respects for many years, as enlightened views have prevailed more and more among physicians, and an increasing intelligence has gradually rendered mankind willing to accede to the changes that science and experience have dictated. The superstitions of the sick chamber, however, yet linger about it with a tenacity only equalled by that with which other superstitions are cherished, chiefly, it is true, among the ignorant, but only too often among the educated and intelligent.

Another point of considerable importance and much delicacy in the management of these diseases, is the proper use of stimulants. The question with regard to them varies very much in different persons and different stages of disease. For the most part we may be safely governed as to their exhibition by the appetite and disposition of the patient, and by their effect upon his sensations and his condition when they have been taken. There is hardly any case where there is a fair decided longing for cordials, that they may not be at least safely admitted upon trial. If it is found that they produce heat, flushing, thirst and restlessness, they can be suspended, and their unfavorable effect is usually very transient. In the first stages of many cases, where a tendency to sensations of exhaustion and prostration show themselves early, especially in typhoid fever, a moderately-diluted stimulant, a light wine, ale or cider, if the patient distinctly desire and relish it, is found beneficial, or at least innocent, and I have often known them taken through the whole course of such a case. Still, the principal use of stimulants is found in the closing stage of disease and during convalescence, and it is by no means intended to imply that they are of universal or even general necessity. Most patients whose health has been good, and especially children, will pass through disease and recover perfectly well without them. It is best that they should. It is best, where we can, to trust to the natural course of events, and depend upon the return of the healthy power of digesting and appropriating suitable nourishment. Still, where there is a deficiency in this; where there is a want of restorative power, with exhaustion and prostration; and especially when matters come, as it were, to a stand, a judicious use of such stimulants as are suggested by, or are agreeable to, the natural appetite, will be often found to impart new vigor and give a decided forward impulse.

But in admitting the use of stimulants, we are not to confound a true and natural impulse for them, suggested by the natural want and appetite of the system, with the idea often existing in the sick, and suggested to them by the well, that stimulants are in themselves capable of giving strength, and are to be depended on for this purpose, whenever a patient is weak, independently of any natural appetency for them. All states of sensible weakness are

not appropriate states for their use. They may have no tendency to relieve it; on the contrary, they may increase it, especially early in disease. It is only where there is a decided natural craving, or at least where the idea, when suggested, is naturally agreeable, and where also the effect is salutary, that stimulants and cordials are to be generally indulged.

There are, however, certain states presented in disease in which we are called on to depart from this general principle, and interfere, with the free use of stimulants, for a different purpose. In these cases death is imminently threatened, and our purpose is to keep up life, to prevent death, so far as this is possible by artificial means, to gain time for the system to rally and carry through its effort for the natural removal of the disease.

Two cases of this sort present themselves; the most illustrative ones are found in typhoid fever, though they may be met with in any acute disease. In one case the patient has been reduced by the natural course of things to so very low a state of exhaustion, that it seems doubtful if there is sufficient vitality to keep up the struggle, till the disease has time to subside by its own limitation. The point here is to prevent death till the power of recovery comes into the ascendant, and turns the scale in favor of health. It is doubtful how much effect can be produced in such cases, but if at all, it must depend upon a steadily-continued and frequent use of so much stimulus, wine, brandy, &c., as will raise up from time to time the flagging functions, and keep them in activity till they are able to gain upon the exhausting influence of disease.

The other case is a more hopeful one. The patient has been reduced to perhaps an equal state of exhaustion by some suddenly depressing cause, such as a loss of blood from the nose or bowels, in typhoid, or the uterus after labor. Here, though the actual exhaustion is at the moment as great, it has been brought about through a different process. There is a reserved power, which, if time can be gained, the system may fall back upon, reaction become established, and recovery take place. Here also the hope depends upon husbanding the vital power by fresh air, the horizontal position with the head somewhat depressed below the level of the body, and by the continued administration of vinous and alcoholic stimulants.

It is desirable always, in managing patients who are in pressing danger of dying from acute disease, to keep distinctly in mind the precise nature of the cause upon which this danger depends. Men do not die from weakness, in the common understanding of the term, i. e. from an annihilation of the power of recovery. This is not often entirely lost as long as life continues, since we observe that an effort at healing, as in cuts, wounds, blisters, leech-bites, &c., is going on very late. Men die because this power is prevented from successful exertion by the conditions of the disease. Thus, a child dies of croup, not because the power of re-

covery is exhausted, but because the obstruction offered to respiration does not afford time for its available exercise. Remove this obstruction by opening the trachea, and time is afforded for the natural cure. A person who has taken laudanum does not directly die from the poison, but from its interference with a function which is immediately necessary to life. Prevent death from this by artificial respiration, strong coffee, forced muscular exertion, the infliction of pain and other measures, and the poison will be eliminated by a natural process, and the patient will recover—for the process of elimination is going on up to the moment of death. It is upon the same general principle that in the cases just referred to, we are to seek to prevent death, in the hope that time may be afforded for a corresponding removal of the cause by which it is brought about.

There is one class of cases of acute disease, and by much the largest, in which we have good reason to judge that there is no danger—another, but a very small one, in which we have equally good reason to judge there is no hope. There is another class, lying between these two, in which there is both much to hope and much to fear. These classes actually exist, though we cannot always determine where each individual case is to be placed. All should, therefore, be submitted to the best management, but it is in the last class that the mode of treatment in itself is of the most importance, and it is in such cases that recovery often depends upon it. Still we are not to rely with any great confidence upon our power of preventing death in the last extremity. The actual saving of life at this stage is probably a rare occurrence. If the scale is turned in favor of life, it is rather done by the measures steadily used through the whole course of the case, than by those adopted in the last extremity. The general principle upon which these are to be pursued has been more than once illustrated, and the due regulation of the diet, which has just been considered, is one of the most important means in carrying it out. Still, there is another, a sufficient supply of air of proper quality for respiration, that is even more important, and yet it is less considered, or at any rate the manner in which it is enforced is less perfectly understood. It is not too much to say, a deficient ventilation has more to do with the mortality of acute diseases than any other single circumstance in their management.

No doubt the necessity of sufficient ventilation is now universally acknowledged, but the difficulty is in the appreciation among mankind of what sufficient ventilation is. The more freely and constantly the patient with acute disease is entirely exposed to the open air of heaven, the more advantageously does he go through with his malady. No fact in therapeutics is better established than this.* But we know how far short of this is the system on

* The recent admirable work of Miss Nightingale illustrates this, and many other points in the management of the sick, more perfectly than any other book. It should be the guide of every attendant on the sick, and may be consulted with advantage and instruction by every practitioner.

which these cases are treated, and what trivial objections are constantly admitted as sufficient. For how great a part of the year is it deemed sufficient that the sick-room be cautiously ventilated for a short period once a day; how almost universally is it judged that a cloudy sky, a fall of rain, a damp and foggy atmosphere, an east wind, are necessary signals for closing the windows and immuring the patient amid the emanations of his own disease. It is impossible to dwell upon all the details of this branch of treatment, but it may be summarily said, that in any severe case of acute disease it is necessary, in order to the best welfare of the patient, that he should not only have an abundance of fresh and pure air about him, but that he should be constantly receiving a new supply, so that the same portion should never be twice passed through the process of respiration. This is what should be aimed at. No doubt it is in strictness ordinarily impracticable, but the more nearly it can be approached, the better is the patient's chance.

[To be continued.]

CASE OF POLYPUS OF THE TRACHEA.

[Read before the Boston Society for Medical Improvement, Sept. 9th, 1861, by W. C. B. Fifield, M.D., of Harrison Square, Mass., and communicated for the Boston Medical and Surgical Journal.]

I first saw Mrs. Marietta Hollis at her confinement, in the year 1857. She was then a robust girl, between 15 and 16 years old. Her father was a confirmed asthmatic; her own health perfectly good. May 18th, 1859, I was called in the night to attend her in a violent attack of asthmatic breathing. Emetics were administered, but complete relief was only obtained by inhalation of sulphuric ether. A profuse expectoration of heavy mucus, lasting for some days, terminated the attack. Attacks continued to occur, increasing in severity, but always relieved by the inhalation of ether, until January, 1860, when the free exhibition of it was attended with such well-marked symptoms of hysteria, that its use was abandoned and never again resumed. The asthmatic paroxysms in this young person were remarkably severe; often a fortnight would elapse before she dared to enter a bed, or even to lie down a single moment, she in the mean time working constantly on shoes to support herself and child. She was animated with a courage such as I have never seen equalled. After the abandonment of ether, the greatest relief was gained from the use of the lobelia inflata, in the form of tincture, as recommended by Dr. Eberle, in his "Practice of Medicine." The usual dose was two teaspoonfuls, at about twenty minutes interval between each spoonful.

In March, 1860, she had an attack of asthmatic breathing, with cough and expectoration, which lasted until Aug. 20th. So great was the difficulty of breathing, so large the amount of the expectoration, and so acute the pleuritic stitch accompanying the cough, that I could scarcely doubt the existence of tubercles. The stetho-

scope, however, showed only great bronchial râles every where present in the chest. During this whole period, from March till August, she never lay down in bed. Propped up with chairs and pillows, she would drop asleep, until her slumber becoming profound, she would fall from the bed to the floor. Getting up, she would again arrange her supports, again perhaps to fall. She was also distressed by the urine being ejected by the violence of the cough; her clothes being always wet, and the urinous odor making her disagreeable to her friends. About the 20th of August, 1860, she had a plentiful eruption of measles. After this she rapidly grew better, and remained in tolerable health through the winter and spring, the paroxysms being rather mild and rare. The incontinence was less, but still took place when the cough was more than ordinarily severe. She was in tolerably good flesh, but changed from her original tint of rude health to pallor.

About the 1st of July, 1861, she was compelled by poverty to separate herself from her only child. This grief told heavily on her. Shortly after this I saw her. She was then very pale; some dyspnœa; feet and ankles swollen. Auscultation revealed besides the usual râles, a soft bellows-murmur of the heart, and a well-marked *bruit de diable*, or musical murmur in the neck. Two days afterwards I was called to see her in a fit of hysteria, resulting from an attempt to work, and a conversation regarding her child. Three days after this she had an attack of dyspnœa, accompanied with vomiting, from which no relief was obtained. For four days and nights she sat with her forehead resting on the back of a chair—she would allow no pillow or other covering upon it. The weather was intensely hot, and she for the first time expressed an ardent desire for death. It came towards the evening of, I think, the 14th of July.

Autopsy, the day but one following. Body well nourished. Heart healthy. Lungs perfectly free from any tubercular deposit. Right lung pale and crepitant. Left lung of a darker color, moderately congested. No appearance of emphysema in either. The lungs being removed from the body, I divided the trachea to the bifurcation. Cutting into the right bronchus, the floor presented some superficial erosions. The smaller divisions were filled with semi-purulent mucus. Turning my attention to the left bronchus, I could not discover its opening. Looking more closely, I found it perfectly covered by a firm, rosy polypus the size of a small grape. The pedicle being attached to the trachea, at the mouth of the bronchus, it had acted as a ball-valve, allowing expiration, but forbidding inspiration. No other polypi were seen.

I have consulted many authors, including Gibb on the Throat and Air Passages, and although reference is made to polypi of the larynx, I find no allusion to polypus of the trachea.

The specimen was transmitted to Dr. Ellis, who has furnished the following description of the microscopical appearances:—

"The growth was quite soft, of a whitish color, and appeared to separate into many minute lobules, very loosely coherent. On microscopic examination, however, nothing like lobular structure was seen. It appeared to be composed of small granular corpuscles, each about the size of a pus corpuscle."

THREE CASES OF POISONING BY STRAMONIUM.

[Communicated for the Boston Medical and Surgical Journal.]

MESSRS. EDITORS,—Dr. Buckingham's case of poisoning by stramonium (reported in your JOURNAL of Oct. 31st), reminds me of some cases which I had about seven years ago; and as the symptoms in my cases differed considerably from those in the case reported, a brief description of them may be of interest.

I was called to see the patients—an Irish woman aged about 60, and two children, aged 3 and 5 years respectively—about 10, P. M., and on inquiry learned that the woman had at noon cooked a quantity of young stramonium plants—a part of the "mess" was shown me—for *greens*, and that all three had eaten of them. The time is so long since, that I cannot recall all of the symptoms, but I remember distinctly that there was vomiting, cold clammy perspiration, coldness of the extremities; small, infrequent, feeble, almost indistinct pulse; great pain in the region of the stomach and bowels; thirst, &c. I immediately gave tartrate of antimony with warm drinks, which acted promptly and efficiently, bringing up considerable quantities of the partially-digested "greens," the nature of which was plainly determined by the smell alone. The emetic was followed by stimulants, which in the course of about two hours caused a reaction in the children (who ultimately recovered), but produced no apparent effect on the woman, who died the next morning, about 7 o'clock, in a state of collapse greatly resembling that of cholera.

One peculiarity in these cases was the fact of the poison remaining undigested, or but partially digested, for so long a time—at least *nine hours*—after eating it. I learned, however, that a physician had been called three hours before I saw the patients, and that he had given Dover's powder (!) to them all, and this may in part account for it.

I am aware that I have but imperfectly sketched these cases, but the length of time which has elapsed since I saw them, must be my excuse. Yours truly, J. O. HARRIS.

Ottawa, Ill., Nov. 5, 1861.

Army Medical Intelligence.

General Martindale's Division—Extracts from a Letter from Brigade Surgeon George H. Lyman.

To the Editors of the Boston Medical and Surgical Journal.

The following interesting and important facts relative to the sanitary condition of one of the Divisions composing the Army of the Potomac, I am authorized to offer to you for publication in the Journal. They are abstracted from a letter to me from Brigade Surgeon George H. Lyman, now in camp, near Hall's Hill, Va., and actively engaged in the arduous and responsible duties of his office. Dr. Lyman is attached to General Martindale's Division, and has an almost unlimited field of observation in the departments of camp-hygiene and military surgical details. Those who know his energy and capability will feel sure that he will be found equal to the task imposed upon him, and will hope to hear from him again upon topics of such absorbing interest. I have taken the liberty to suggest to Dr. L. that his communications would be most acceptable to your pages. M.

Immediately on joining his Brigade, Dr. Lyman made, in company with the General in command, a thorough inspection of the camps, and reported thereupon, at length. To quote his own language :—"They (the camps) were bad enough—dirty kitchens and dirty tents, and camp-police generally—in some instances entirely—overlooked." The season is next referred to, in regard to its salubrity. Dr. Lyman says: —"This is said to be an unusually healthy season by resident practitioners; otherwise the neglect of the most obvious sanitary rules would doubtless have produced its usual results. The Division were encamped during September at Fort Corcoran and its vicinity, opposite Georgetown, one of the most unhealthy localities near Washington. *Few* severe cases of malarial disease occurred; but nearly all the sickness was evidently more or less modified by the poison—as shown in ordinary colds, over-fatigue, rheumatic affections, &c.; by the biliary disturbance and torpor of the portal circulation generally. One regiment, encamped in the open ground, nearly half a mile from the river, upon the top of the hill, had little or no disease comparatively. Since our removal some miles into the interior, this same regiment has had so large a number of men ill with malarial disease, generally bilious remittent, as to oblige the opening of a special hospital for them. And in fact, throughout the whole division, the sickness can be traced almost certainly to the exposure in an unhealthy locality, the previous month. Almost all the diseases now are of a mild typhoid type, not unlike our *slow fever*, with the addition of the biliary disturbance. The initiatory headache, so far as I have observed, is greatly more severe. During the month of September, out of a force, in the First Brigade, of 2882 men, 692 came under medical hands. Of these there were no deaths; and on the first of October, 174 remained on the sick list. During the month of October, out of a force of 3,944 men, 739 were treated; 126 of whom suffered from simple diarrhœa only; and about 20, each, had common continued, quotidian intermittent, remittent, and typhoid fever. The first of November the reports give me but 91 on the sick list, and but three deaths for the month—a very

favorable exhibit certainly, when we consider the extreme carelessness which is shown in enlisting unhealthy men. Blindness of one eye is not so bad, if the remaining one is good; but when men are allowed to come on here with varix, varicocele, hernia, epilepsy (of which last I have discharged two victims this morning), lame hips and cavernous lungs—the examining surgeon should have them charged to his account. With some exceptions, the examiners from our own State have done their duty well, and the result is manifest in the sick reports of our regiments.

"The 18th and 22d regiments, who are in our division, are models of cleanliness and health; and the 9th, although laboring under many disadvantages for want of tents to keep them comfortable, are as efficient a body of men, so far as health is concerned, as can be found this side the Potomac. The thoroughness with which our regiments are equipped can only be appreciated by one who, being upon the ground, is able to compare them with the regiments from some other States. As to tents and blankets, however, I have seen none at all comparable to those furnished by the U. S. The tents brought by the 22d Massachusetts Regiment are altogether too thin; as one would soon discover if obliged to sleep under them some of these cold nights, and particularly on such a night as this, after a day of furious wind and rain. The sick report of the next three days will show the result.

"In the company of Sharpshooters attached to the last-named regiment, there is a tent which promises to excel anything yet invented. When properly pitched, the cords may remain untouched for an indefinite period, the tension upon them being regulated by a double screw inside, which raises or lowers the poles, while at either end a hooded ventilator regulates, at the pleasure of the occupant, the inner atmosphere."

Dr. Lyman refers, towards the last of his communication, to the importance and efficiency of quinia as a prophylactic against malarial disease. He says:—"There is no question of its value. I am the only one of the three or four staffs who has not been more or less affected by malarial influences, and I attribute it solely to having taken, from the beginning, two or three grains of quinine daily, omitting occasionally for a few days at a time. I have yet to learn of any instance where the same result has not followed the same means."

In addition to the medical supervision of his own Brigade, Dr. Lyman has recently been appointed Acting Medical Director of the whole Division of three Brigades, with the unattached cavalry and artillery companies, comprising some 13,000 men in all. It may be added that General Martindale's Division is said to be surpassed by no other in drill and discipline.

Cameron Regiment Dragoons—Letter from Surgeon James Bryan.

To the Editors of the Boston Medical and Surgical Journal.

Having entered the service of the United States as Surgeon to one of our cavalry regiments, it has occurred to me that a few observations on camp life, camp diseases, gun-shot and other wounds, might interest some of your numerous readers. My experience extends only over the period of three months, including August, September and October—summer and autumnal months.

The regiment, originally composed of ten companies, consists now

of twelve; it is a volunteer regiment, and has been drawn entirely from the State of Pennsylvania. A large proportion of the men are from country districts, and the rest are from the city of Philadelphia. We have them of all ages, from 16 to 60, and from most of the occupations of life. We have a few officers and men who have seen service in the regular Army. The change of circumstances of a thousand or twelve hundred men from the position of civilians to that of volunteers or soldiers, was very radical, and produced necessarily in itself very curious effects; some of which I will notice under the head of "Camp Life."

The form of tent adopted by our regiment, is the "wall tent," which presents the appearance of a small house; the front and back uprights, about 8½ feet high, are connected by a transverse pole of about 11 feet in length. The tent is stretched over these and tied on each side, by means of ropes, to pins driven in the ground; over this is stretched a species of awning, called the "fly," which forms the roof, and gives a double protection against rains and storms. This tent is used by the officers (commissioned), of whom we have, of course, between forty and fifty. The Colonel and each of the Staff Officers has two of these tents, placed end to end; the Field Officers have each one tent. The men's tents have each two uprights about 7 feet high, surmounted by a transverse pole about 6 feet long; the tent cloth is stretched over this, and covers an area of about 36 cubic feet. The tent is closed all round, except an opening in the front, which serves as a door. Six men occupy this tent; this makes close quarters, and in cold weather the ventilation is very imperfect. These tents are placed about three feet apart laterally; and with cavalry, about 40 feet between the rows, affording space for picketing the horses. The hospital, sutler and quartermaster's tents are large wall tents.

The standard sleeping accommodations for officers and men, in the summer season, are a blanket and the ground. These are improved by additional blankets and straw or hay as the weather grows colder. The officers, of course, add camp mattrasses, small iron bedsteads, or cots, to their accommodations. These latter, in my experience, generally present one difficulty; they are too narrow, and sometimes too short. There is little difficulty during the summer months in keeping the body comfortably warm; most of the men preferring the bare ground, with a blanket, to anything else, even during a drenching rain.

One curious phenomenon connected with this subject is the facility with which most men adapt themselves to their new circumstances. The delicate dandy of yesterday becomes to-day the rough and blustering soldier; the shy mechanic soon becomes the dashing dragoon, and the puny boy smokes his pipe and cigars, drinks lager (when he can get it), and in regimentals, a world too wide, struts about, aping the characteristics of his fellows. The change in diet, from tea and toast, and beef-steak, to black coffee and dry bread, is borne with laughing fortitude; and so on, to the end of the chapter. This facility of adaptation, however, applies chiefly to the mental and moral faculties; the physical, and especially the digestive functions, are very apt to be deranged by the suddenness and completeness of the change. A very common condition of the new soldier is constipation, with its accompanying nausea and headache. This is followed in a few days by a diarrhœa more or less severe, which in the fall months

is very apt to run on to dysentery. This condition—alternate constipation and diarrhœa—is the normal or usual one of many persons living in camp.

I have observed in private practice, in Philadelphia, that diarrhœas set in about the 20th of August, dysenteries about the 20th of September, and malarious complications, as bilious fever, &c., about the 20th of October. An approximation to this order of things takes place in camp, as dysenteries and intermittents are more common since the 20th of October, than previously. The typhoid fever increases, as the cold weather advances.

The young soldier, while he is mentally pliable, and adapts himself to the regulations of the camp, is strongly tempted, by the craving of his stomach, to change the uniformity of his diet by seeking something more palatable and more varied. Hence, in the absence of a more agreeable diet, he seeks, by the use of intoxicating drinks, to blunt his sensibilities and his cravings. Intoxication appears to be the great bane of camp life, to be controlled or repressed only by strict military discipline. General McClellan was aware of this when he issued the order forbidding the sale of intoxicating liquors in camps. The appetite for them might be very much diminished, however, by having the soldiers supplied with a sufficiency of fresh food, dried fruit, and condiments, such as milk, fresh bread and butter, dried apples, pears, and plums, with a sufficiency of mustard, pepper, pickles, &c. Fresh apples would be a great luxury and benefit, assisting to prevent the scurvy and typhoid fever. Mustard, pepper, and other condiments, except salt, of which there is necessarily too much, would be of great use. Many will say that these are luxuries for soldiers; so they are, but they are quite accessible to the volunteers. The government supplies its soldiers bountifully with food, but in no great variety. The rations dealt out are considerably more than the men on an average can consume. The surplus might be exchanged, with great advantage, for the articles above enumerated, and many others. This could be done by the men themselves, or by the quartermasters of the companies. If sutlers were required, by law, to supply these and other necessaries, instead of the indigestible pies and intoxicating drinks which some of them do sell, they would reap a fair profit, and would be a great blessing to the soldiers, particularly the volunteers. Whereas it is now notorious that they monopolize the business of the regiment in this direction, and confine their supplies to a few very profitable, but very destructive articles. For this the soldier has no redress; he cannot pass beyond the lines of his camp without special permission, and in an enemy's country this permission will do him no good.

As a general rule, the soldier, and particularly the cavalry soldier, in camp, has enough of physical exercise; he has his early and late roll-call—morning and afternoon drills—breakfast, dinner and supper call—calls to feed and water his horse, besides long and tiresome dress-parades; to say nothing of guard and picket duty, scouting duty, taking care of his accoutrements, harness, clothes, &c. &c. The truth is, a volunteer is more likely to be over, than under, worked. The exercise on horseback, especially on rough horses, is found to be intolerable to those who are predisposed to convulsions, consumption, disease of the liver or kidneys, hernia, varicocele, hydrocele, piles, varices, or ulcers

of the legs. It in fact requires a pretty strong and sound man to make a good dragoon.

Diseases of Camp Life.—The ordinary diseases of camp life are diarrhœa, dysentery, constipation, rheumatism, intermittent, remittent, bilious, typhoid and typhus fevers. The occurrence of measles, small-pox, and other eruptive and contagious diseases, is due to outside causes, not necessarily connected with camp life. The first named diseases, with a few more, are sure to be found in camps.

Diarrhœa.—This disease, as has already been stated, is generally preceded by several days' constipation of the bowels, and in the recently enlisted volunteer is usually of a mild character. Pain in the region of the stomach and umbilicus gradually extends down to the colon and rectum. The discharges, at first more or less solid, become afterwards fluid, mucoid, watery or bilious, accompanied not unfrequently with considerable tenesmus. The abdominal pains cease with the occurrence of tenesmus, and this again terminates perhaps at the end of two or three days from the onset of the disease. The patient is thus restored to health without medical interference, for the time being. In other cases, pains are more severe, continue longer, discharges are more frequent and exhausting, the patient becomes debilitated, and instead of gaining, loses his appetite, and demands medical assistance. In this instance, the use of a calomel or blue pill cathartic, repeated or not, according to the condition of the tongue, and followed by a dose of castor oil and laudanum, or other laxative, will generally result in restoring the patient to his ordinary health. The exceptional cases (*always with a clean tongue*) will require the administration of tannin, lead, or some other astringent, or perhaps an opiate. We are told that Dr. Tripler, Medical Director of the Army of the Potomac, recommends the use of a solution of the sulphate of magnesia and tartar emetic, in these and similar, but more severe, cases. We have found the treatment, where we have resorted to it, a very good one.

Dysentery.—Where the discharges, as they frequently do, especially as autumn approaches, become bloody, and assume the characteristics of dysentery, the prostration is greater, pulse becomes small and wiry, the skin cold and clammy, and the general debility much more marked. Distinction must here be made between the disease itself, uncomplicated, and more or less local, and that in which it is complicated with, or caused by, a typhoid condition of the system. In the first instance, the disease may be frequently arrested by a simple astringent, provided the tongue be clean. In the second, pretty free purgation, as above directed for diarrhœa, until the tongue is cleaned, will be indicated. In some cases this may be followed by the use of tonics and stimulants. Where the symptoms are more than these, and the typhoid condition more marked, the tongue becoming black and cracked, the abdominal parietes sinking down, with the appearance of petechial specs or blotches, &c. &c., the case runs on to typhoid fever.

My sheet is covered, and I must close.

Respectfully yours, JAMES BRYAN,
Surgeon Cameron Dragoons, Penn. Vol.

Camp Griffin, November 6th, 1861.

THE following intelligence from the seat of war has been received during the week.

To the Surgeon General.

{ Headquarters 22d Reg't, Mass. Vol.,
{ Hall's Hill, Nov. 5th, 1861.

Dear Sir,—It is now three weeks last Sabbath since our arrival at this place, during which time the affairs of our encampment have moved on favorably and agreeably.

We have up to this morning's report 7 in hospital and 22 in quarters, a very perceptible increase since the storm, which was a very severe one here for us, situated as we are on the summit of quite a rise of ground. The soil and subsoil being almost impervious to wet, it is retained.

Our monthly report, starting from the time of our arrival up to the first of November, shows a striking contrast of small ratio when compared with the Maine 2d and 18th Mass., the former showing a ratio of over 300 to the thousand, the latter something like 40, while we report only 15.4 to the thousand.

On our arrival we took possession of this ground, vacated, I think, by the Mass. 9th, and found it in bad condition, but by constant pains, and strict hygienic discipline, we have succeeded in arranging an encampment which is excelled by no one of our neighbors in beauty or cleanliness. Of course there can be still greater improvements, and we strive daily for their accomplishment.

On the whole, I take pleasure in saying that the 22d regiment of Massachusetts stands to-day in this Division as inferior to none, as regards health, morals and men of worth, and I shall endeavor to see to it, as far as it concerns my official capacity, that it shall retain a name in every respect worthy of its Colonel, who has now left us, but whose influence and good wishes we still hope to retain. My health is good, better than when I left Massachusetts. I am pleased with our officers, and we are contented and happy. For my own part, I have not one wish or desire to return till this most atrocious rebellion and savage warfare is put down.

Very respectfully, your ob't serv't, E. L. Warren,
Surgeon 22d Regiment Mass. Vol.

P. S.—I should have remarked that we have had no deaths among us; none sent to General Hospital; no one particular type of disease. There have been a few slight cases of continued fever, with any number of colds, and a few cases of diarrhœa—from the effects of the water, I judge. Respectfully yours, E. L. W.

Dr. Baxter, Acting Brigade Surgeon of the 1st Massachusetts Brigade, writes that the health of the 12th regiment is good, "with ten in hospital, several cases of which are typhoid fever. Every fever at this period assumes a typhoid character; and a remittent or intermittent which can usually be broken up, will go along for several weeks, with red and glossy tongue."

Period for Primary Amputation in Gun-shot Wounds.—Drs. Tripler, Gross, and Hamilton, in their works on Military Surgery, when treating of amputation, are agreed in advising the primary operation. Tripler recommends the adoption of the flap operation in the arm and thigh, but prefers the circular for the forearm and leg, where time is of great importance. Hamilton advises the flap operation. Dr. Scrive, the Surgeon-General of the French army in the Crimea, makes but one exception to the rule of primitive operation, and that is in the operation at the hip-joint.—*Med. and Sur. Reporter.*

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON: THURSDAY, NOVEMBER 14, 1861.

DR. HOLMES'S INTRODUCTORY LECTURE.—The introductory lecture of the course before the Harvard Medical School was delivered on Wednesday last by Prof. O. W. Holmes. The discourse was all that could have been expected from its brilliant and imaginative author. Glancing back at the past twelve years of his term of service, he paid a feeling and merited tribute to each of the gentlemen who had acted during that period as his demonstrators in the department of anatomy, aptly referring to the peculiar merits of each, and rendering to them deserved honor. He then took a rapid survey of the domain of medical science, beginning with his own special department. After showing that descriptive anatomy had long been a nearly complete science, he dwelt upon the vast results which the microscope had accomplished of late years, and the great discoveries in physiology which the present generation has made and is now making; incidentally referring to the valuable researches of Dr. John Dean,* of this city, into the minute structure of the nervous system, which he characterized as among the most important contributions which had ever been made in this field of microscopic study. In speaking of the laws of force, and the limit beyond which human investigation fails, and must always fail to go, the Professor spoke with an eloquence and reverence which moved his audience most profoundly. Referring to the limitations of human knowledge,—Science, said he, is the topography of ignorance. We triangulate the space from one little peak to another above the vast abyss of the unknown around and below, and with our sounding lines we here and there bring up a little sand or gravel from the bottom which our dredges can never hope to reach. His summary of the elements of the human frame, and his description of the methods in which they are combined, illustrated most happily by various novel comparisons to processes used in the mechanic arts, together with a simple mnemonic system by which they could be easily retained in the mind, were particularly interesting and instructive.

The Professor's attention was naturally given, in the main, to those divisions of medical science which are principally engaged in observation, and so his own and the department of chemistry were most particularly dwelt upon. He did not omit, however, to refer to the great improvements in modern surgery over the barbarism of the ancients, and he urged the importance of the study of Nature's laws in the practice of medicine. In this connection he used an illustration, which, literally interpreted, like an epigrammatical expression employed by him on another occasion not a great while since, would, we are confident, convey a false impression of his belief in the efficacy of medicine in the treatment of disease. Such expressions grow out of the habit of a man's mind, and should be interpreted in the light of this fact. The whole discourse was radiant with the author's peculiar brilliancy, and crowded with the profuse imagery of his inexhaustible imagination.

* The Lumbar Enlargement of the Spinal Cord. By John Dean, M.D. With four Plates. Memoirs of the American Academy of Arts and Sciences, Vol. VIII., Part I., New Series. Boston, 1861.

It chained the attention of his audience from beginning to end. We sincerely hope it may be published, for it deserves a larger audience than the lecture-room of the College can contain. The lecture was listened to by a crowded auditory, and, judging from appearances, the number of medical students for the winter is quite up to the usual attendance in past years.

Army Blankets.—We have learned from an authentic source that the blankets supplied to the 22d Mass. regiment are of the most worthless character. Many of them are already in rags and entirely unfit for use. We also hear that the English blankets, purchased for the government, turn out, at least some of them, to be of the most miserable quality. The method of testing the strength of a blanket is, we are told, to spread it out on the floor, to stand in the middle of it thus spread out, and taking hold of the sides to pull upon it with main strength. Under this test, the English blankets give way at once, and handfuls can be torn out with the greatest ease. There must be fault somewhere, and we see no reason to attach it to the dealer, who sells his article for what he can get. Are the purchasers of army blankets competent to judge of the quality of the goods they buy?

Messrs. Editors,—In my review of Dr. Jackson's book on Ether, I was misled by his expression in a note at page 66, coupling, in a charge of untruthfulness, the New American Cyclopædia with a book entitled "Trials of a Public Benefactor," by Dr. Nathan P. Rice, so far as to attribute to the former a mutilated quotation which is not in it, but which occurs on page 218 of the latter. To this latter must therefore be transferred the charge of dishonesty and of this particular untruthfulness. We cannot but consider it unfortunate that the Cyclopœdia should have relied upon, and referred to this book of Dr. Rice, when it might have obtained the facts in their truth from headquarters, the "*Comptes Rendus*" of the French Academy.

W. E. C.

Messrs. Editors,—In looking over some old papers to-day, of 1828, in the *New Hampshire Observer* I found the description of a "new disease," so called. Thinking it might be diphtheria, and it being unsettled when that disease first appeared in this country, I herewith send a you a part of the paper with the article on the subject. We certainly see by it that there was a disease thirty-three years ago which was very fatal, and appeared to be diphtheria by the mode of attack and termination. If it is worthy of notice, it is at your disposal.

Yours, &c., F. H. Currie.

West Boscawen, N. H., November 9th, 1861.

Curious Disease.—Within the last three weeks, Mr. Alvah S. Crafts, of Middlefield, has lost three children, and is now childless, by a disease without a name in this country. The first symptoms of diseased affection show themselves in a cankerous humor, near the root of the tongue, inflammation ensues, and the subject finally dies in all the agony of the croup.—*Freeman's Journal.*

We publish to-day an interesting letter from an old and valued correspondent, Dr. James Bryan, Surgeon of the Cameron Dragoons. Dr. Bryan is well known as a former Professor in the Philadelphia College of Medicine, and we welcome him again most cordially to our pages. For his communication we offer him our

grateful acknowledgments. We shall be most happy to hear from him at any and all times.

DR. ALFRED HITCHCOCK, who was ordered to report to the Surgeon-General at Washington, having been elected to the Executive Council of this State, has declined the army appointment.

Dr. H. M. WELLS, late Assistant Surgeon of the United States Naval Hospital at Chelsea, has been detached from service there and ordered to join the sloop-of-war Portsmouth, at Kittery. He has been succeeded by Assistant Surgeon C. H. Perry, of Worcester. Dr. Fox is the Resident Surgeon at the hospital.

THE NEW YORK MILITARY HOSPITAL.—The building now devoted to the sick and disabled volunteers was formerly a department of the General City Hospital, but after lying in disuse for two years, says the New York Daily *Times*, it was, on the 26th of April last, taken in charge by a leading physician of New York, who, with his assistants, led by Dr. Hogan, has fitted it up in complete order as a military hospital. Only twenty-two deaths have occurred up to the present time, although six hundred and forty patients have been admitted. Many have been discharged well, and have reassumed military duty; while others who never should have enlisted, through incapacity to endure hardship, have been sent away relieved as far as possible. At the present there are but seventy-five patients in the Hospital, and of these twenty-seven were received during the passage of the Forty-Fourth (Albany) Regiment through the city.

VITAL STATISTICS OF BOSTON.

FOR THE WEEK ENDING SATURDAY, NOVEMBER 9th, 1861.

DEATHS.

	Males.	*Females*	*Total.*
Deaths during the week,	31	29	60
Average Mortality of the corresponding weeks of the ten years, 1851–1861,	34.9	33.0	67.9
Average corrected to increased population,	..	..	75.71
Deaths of persons above 90,	1	..	1

Mortality from Prevailing Diseases.

Phthisis.	Chol. Inf.	Croup.	Scar. Fev.	Pneumonia.	Variola.	Dysentery.	Typ. Fev.	Diphtheria.
9	1	1	1	8	0	1	2	1

METEOROLOGY.

From Observations taken at the Observatory of Harvard College.—For the week ending Nov. 2d.

Mean height of Barometer,	29.985	Highest point of Thermometer,	59.0
Highest point of Barometer,	30.342	Lowest point of Thermometer,	31.0
Lowest point of Barometer,	29.500	General direction of Wind,	W.N.W.
Mean Temperature,	45.0	Am't of Rain (in inches)	1.387

NOTICE.—Our subscribers in Essex County and the South-eastern part of New Hampshire are respectfully informed that Mr. Benjamin Drew, Collecting Agent, is about to present bills to them in person. We bespeak for him a ready welcome and a prompt payment.

BOOKS AND PAMPHLETS RECEIVED.—On the Parasitic Affections of the Skin. By T. McCall, M.D. London, John Churchill, 11 New Burlington St. (From the publisher.)—On Sounds caused by the Circulation of the Blood. By A. Leared, B.A., M.D., Univ. et Oxon., &c. (From the Author.)—Proceedings of the Royal Society, Vol. H, No. 45. London, Messrs. Taylor & Francis. (From the publishers.)—Lectures on Materia Medica and Therapeutics. By John B. Beck, M.D. Third Edition. Prepared for the press by C. R. Gilman, M.D. New York, S. S. & W. Wood. (From the publishers, per Ticknor & Co.)

MARRIED,—In Salisbury, Nov. 5th, Yorick G. Hurd, M.D., of Amesbury, to Miss Ruth A. Brown, of S.—In New York city, Nov. 11th, Alfred E. M. Purdy, M.D., to Miss Annie F. Stout.

DIED,—In this city, Nov. 5th, Edward Brooks Everett, M.D., 31.—Nov. 9th, of typhoid fever, James H. Bridge, M.D., 26 years, 3 mos.

DEATHS IN BOSTON for the week ending Saturday noon, November 9th, 60. Males, 31—Females, 29.—Accident, 1—apoplexy, 2—bronchitis, 1—cholera infantum, 1—consumption, 9—convulsions, 3—croup, 1—diarrhœa, 2—diphtheria, 1—dropsy of the brain, 5—drowned, 1—dysentery, 1—scarlet fever, 1—typhoid fever, 2—disease of the heart, 2—infantile disease, 4—intemperance, 2—jaundice, 1—congestion of the lungs, 1—inflammation of the lungs, 8—marasmus, 2—old age, 1—paralysis, 2—rupture (of aorta), 1—unknown, 4—uræmia, 1—whooping cough, 1.

Under 5 years of age, 27—between 5 and 20 years, 5—between 20 and 40 years, 10—between 40 and 60 years, 6—above 60 years, 12. Born in the United States, 38—Ireland, 15—other places, 7.